



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/802,808	03/08/2001	Andrew D. Firlik	337348020US1	8272
25096	7590	09/15/2004	EXAMINER	
PERKINS COIE LLP			BRADFORD, RODERICK D	
PATENT-SEA			ART UNIT	
P.O. BOX 1247			PAPER NUMBER	
SEATTLE, WA 98111-1247			3762	

DATE MAILED: 09/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/802,808

Applicant(s)

FIRLIK ET AL.

Examiner

Roderick Bradford

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 124-167 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 165-167 is/are allowed.
- 6) ☒ Claim(s) 124-126, 131-146 and 150-164 is/are rejected.
- 7) ☒ Claim(s) 127-130 and 147-149 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 08/03/04.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 124 and 143 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 124-126, 131, 132, 136-145, 150, 151 and 155-164 are rejected under 35 U.S.C. 102(e) as being anticipated by Rezai et al. U.S. Patent No. 6,418,344.

Referring to claims 124, 125, 131, 136, 140, 143, 144, 150, 155, 159 and 162

Schiff discloses a method of stimulating the brain of a patient to effectuate a neural function comprising:

- Providing an image of neural activity in the cortex of the brain of the patient (column 5, lines 19-24)
- Selecting a stimulation site at the cortex of the brain of the patient where a change in neural activity is expected to occur to carry out the neural-function (column 6, lines 12-19)

Art Unit: 3762

- Applying electrical signal directly to the stimulation site, wherein the signal has a voltage of less than 10V, a frequency less than approximately 1000Hz, and a pulse width less than approximately 100ms (column 8, lines 29-33).

Referring to claims 126 and 145, wherein applying the electrical stimulation to the stimulation site comprises a signal having a voltage of approximately 50mV to 5V directly to the stimulation site (column 8, line 31).

Referring to claims 132 and 151, further comprising applying the electrical stimulation directly to the stimulation site by implanting an electrode proximate to the cortex of the patient and aligned with the stimulation site (column 10, lines 3-6).

Referring to claims 137 and 156, wherein applying the electrical stimulation to the stimulation site comprises applying a signal having a frequency of less than approximately 200 Hz (column 8, line 32).

Referring to claims 138, 139, 157 and 158, wherein applying the electrical stimulation to the stimulation site comprises applying a signal having a frequency of approximately 40-200Hz and 50-100Hz (column 8, line 32).

Referring to claims 141, 142, 160 and 161, wherein applying the electrical stimulation to the stimulation site comprises applying a signal with a pulse width of less than about 200 μ s and a pulse width of less than 100 μ s (column 8, line 31).

Referring to claim 163, further comprising performing behavioral therapy on the patient related to a body part controlled by the particular neural-function while applying the electrical signal directly to the stimulation site (column 5, lines 4-18).

Referring to claim 164, wherein the patient has an impaired function because of a loss of the particular neural-function and the method further comprises performing physical therapy on a body part of the patient controlled by the particular neural-function while applying the electrical signal directly to the stimulation site (column 8, lines 33-48).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 133-135 and 152-154 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rezai et al. U.S. Patent No. 6,418,344.

Referring to claims 133-135 and 152-154, Rezai discloses the claimed invention except for wherein the electrode is placed in direct contact with the pial surface or placed at the dura or placed in contact with dura of the brain of the patient. It would

Art Unit: 3762

have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as taught by Rezai to include wherein the electrode is placed in direct contact with the pial surface or placed at the dura or placed in contact with dura of the brain of the patient since it was well know in the art that placing the electrode on the pial surface or at dura on the brain or in contact with the dura as means of stimulating different part of the brains as to treat different ailments.

Allowable Subject Matter

7. Claims 165-167 are allowed.
8. Claims 127-130 and 147-149 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. John et al. U.S. Patent No. 6,066,163.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roderick Bradford whose telephone number is (703) 305-3287. The examiner can normally be reached on Monday - Friday 7 a.m. - 4 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (703) 308-5181. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 3762

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

R. Beall

R.B.

Angela D. Sykes

ANGELA D. SYKES
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700